

## Wiring Specifications for EE459 AC Load Simulator

Connection to the AC loads (light bulbs) on the simulator board is through a 6-conductor plug. Your board should use the male plug and the simulator board with the bulbs uses the mating female receptacle. Use the following wiring pattern for the plug.

**Pin 1:** Common

**Pin 2:** not connected

**Pin 3:** Load 4

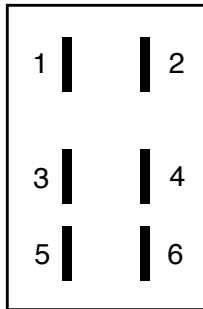
**Pin 4:** Load 3

**Pin 5:** Load 2

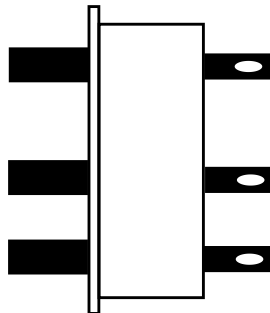
**Pin 6:** Load 1

Connecting together the common and the Load 1 circuits will cause load 1 to energize. Connecting together the common and the Load 2 circuits will cause load 2 to energize, etc.

Male plug - contacts



Male plug - side view



Male plug - solder points

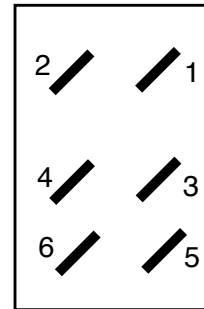


Figure 1: 6-Conductor Cinch-Jones plug

**Warning:** The connections from the simulator board carry 12 Volt AC power. Do not connect these directly to any logic elements on your project board. The connections to activate the lights must be made through a relay, triac or other device that isolates the 12 VAC power from the digital circuit.